

State of the Instructional Materials Market

The Availability and Use of Aligned Instructional Materials in 2023

INTRODUCTION

For almost a decade, EdReports has led educator reviews on the alignment and usability of core instructional materials. We have published over 1,100 reviews of English language arts (ELA), mathematics, and science materials, influencing purchasing decisions in over 20% of school districts, which collectively serve more than 18 million students, and leading to more than 40 publishers adjusting their products.

EdReports' reviews provide educators and decision-makers with independent evidence regarding researchbased criteria to help them choose the best curricular materials for their local needs. With our extensive knowledge of the materials marketplace (having reviewed 97% of the known ELA and math materials), we also publish an annual State of the Market report to share trends, highlight successes, and identify consideration areas for states, districts, educators, and product developers.

Our analysis draws upon detailed reviews and insights from the RAND Corporation's American Instructional Resources Survey (AIRS). This year's report, as in the past, explores factors that contribute to the discrepancies between the availability of aligned materials and those used in the classroom. Even when states require or recommend aligned materials, leaders need to do more to encourage regular use, including comprehensive selection practices, strategic implementation plans, and investment in ongoing curriculum-based professional learning and coaching.



ALIGNED MATERIALS ARE AVAILABLE **ACROSS SUBJECT AREAS**

What are "aligned" materials?

For the purpose of this report, "aligned" refers to core comprehensive ELA, math, and science instructional materials that meet expectations for EdReports' review criteria (e.g. alignment to college and career-ready standards and other dimensions of quality).

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Since the release of our first reviews in 2015, we have seen a dramatic increase in availability of aligned programs. EdReports has reviewed approximately 97% of the known comprehensive K-12 ELA and mathematics materials market and a significant proportion of K-8 science.¹

Of the K-12 mathematics materials EdReports has reviewed, almost half (49%) meet expectations for alignment, 24% partially meet expectations, and 27% do not meet expectations (Table 1). Those proportions are consistent across all grade levels — elementary, middle and high school — with approximately half of all materials reviewed meeting EdReports criteria.

In English language arts, including foundational skills supplements and core K-12 materials, about half (52%) meet expectations for alignment, 33% partially meet expectations, and 16% do not meet expectations. Unlike in mathematics, the average masks large differences across grade levels.

While about two-thirds of materials are aligned at the secondary grade level (high school, 69% and middle school, 62%), the rates are much lower at the elementary level, despite significant state and district policy efforts emphasizing literacy. Less than half of comprehensive materials (44%) and only one-third of foundational skills supplements meet EdReports' criteria for alignment — which includes alignment to science of reading components, including emphasizing systematic and explicit instruction of key literacy components. These findings demonstrate the need for proactive science of reading policies that help encourage creating and selecting high-quality reading materials. Additionally, districts are encouraged to use EdReports' reviews to examine the literacy components of their core materials before picking a supplemental reading program, given how few are aligned.

EdReports has reviewed approximately 40% of the known comprehensive K-12 science market. While we currently only offer a small number of inaugural high school reviews in biology and limited reviews of elementary programs, we have reviewed a significant proportion of the middle school science market. Only one-quarter of middle school science curricula meet alignment criteria, a lower portion than other subjects.

The field of science education presents unique challenges when it comes to the adoption and use of aligned materials. Among these challenges is the sparse availability of programs that reflect the complexity and depth of the Next Generation Science Standards (NGSS). The NGSS and K-12 Framework for Science Education emphasize a three-dimensional learning model that integrates scientific knowledge, practices, and cross-cutting concepts.

¹ We define the "known market" as ELA foundational skills programs and comprehensive, yearlong ELA, math, and science programs. This definition does not include materials that are created by teachers or the schools and districts in which they work, supplemental materials that do not include a comprehensive, yearlong scope and sequence, nor pre-2012 editions or materials no longer being actively sold by publishers.



Many existing materials fail to adequately design for this comprehensive framework. And, unlike ELA and math, science education has historically received less attention and funding for curriculum development, contributing to a lack of robust, well-aligned curriculum options.

To address these challenges, it is vital for states and districts to maintain rigorous science standards and demand high-quality curriculum options, even in a nascent market. In addition, states can play a powerful role in supporting each district's capacity to select high-quality science materials and provide resources for ongoing professional learning that is both tied to science standards and curriculum-focused.

Table 1: Summary statistics for EdReports' grade-level reports by alignment rating, 2023 edition and earlier*

	Me	ets	Partially	y Meets	Does N	ot Meet	Ove	erall
Subject and Grade Band	n	%	n	%	n	%	n	%
ELA & Math K-12	490	50%	269	28%	216	22%	975	100%
ELA FS & core K-12	202	52%	128	33%	61	16%	391	100%
ELA core K-12	187	54%	107	31%	52	15%	346	100%
ELA core K-5	78	44%	63	36%	36	20%	177	100%
ELA core 6-8	61	62%	29	29%	9	9%	99	100%
ELA core 9-12	48	69%	15	21%	7	10%	70	100%
ELA foundational skills	15	33%	21	47%	9	20%	45	100%
Math K-12	288	49%	141	24%	155	27%	584	100%
Math K-5	129	48%	70	26%	71	26%	270	100%
Math 6–8	81	51%	37	23%	42	26%	160	100%
Math 9–12	78	51%	34	22%	42	27%	154	100%
Science K–12	22	27%	9	11%	50%	62%	81	100%
Science K-5	6	33%	0	0%	12	67%	18	100%
Science 6-8	15	25%	9	15%	36	60%	60	100%
Science 9-12	1	33%	0	0%	2	67%	3	100%

^{*} Numbers vary greatly, given the few aligned science materials found.

Growth in the Use of Aligned ELA and Math Materials Slows in 2023

In our 2022 State of the Market report, we highlighted large increases in the use of aligned instructional materials as compared to prior years. Several factors were identified for the 10% increase in teachers regularly using at least one aligned ELA curriculum and an 8% increase of the same for mathematics including an increase in availability of both aligned materials and ESSER funding.

In 2023, despite continued access to pandemic funding and the availability of high-quality materials, regular classroom use of aligned materials stabilized, with ELA usage decreasing by 1% and mathematics usage increasing by only 2% (Tables 2 and 3), while decreases were seen in the use of partially aligned and unaligned materials in both content areas. About one-third (35%) of teachers report using at least one aligned curriculum in ELA, while over half (51%) report using at least one aligned curriculum in math at least once a week.

English Language Arts: The percentage of teachers using at least one aligned curriculum grew from 15% in 2019 to 35% in 2023. While this notable five-year growth indicates progress within states and districts, signaling the importance of using high-quality materials, use still does not match availability. Fully 65% of teachers are not using standards-aligned materials at least once a week.

Also notable in this five-year span is the decline in use of unaligned materials, from 20% in 2019 to 9% in 2023. We hypothesize that the availability increase of aligned materials, coupled with the push from states and districts to adopt science-of-reading materials has encouraged teachers to depart from unaligned curriculum. This gives students better access to quality content.

Mathematics: The use of aligned curricula in math shows a similar upward trajectory over the past five years, with an increase from 30% in 2019 to 51% in 2023. Seeing this number surpass 50% is encouraging, though there is still room for improvement. Again, we see less growth in use between 2022 and 2023. Recognizing that about half of teachers are not using materials that meet quality standards at least once per week, we need to not only procure quality materials, but implement and support classroom use. As noted with ELA, the use of unaligned math materials has significantly decreased over the last five years from 18% in 2019 to 7% in 2023.

Analyses have consistently found differences in use of procured materials between math and ELA, due in part to teacher discomfort with math content at the elementary level, as well as teachers' desire to both incorporate more engaging and authentic texts for students and supplement core materials in elementary

Table 2: Use of standards-aligned ELA materials, 2019–2023

Rating Category	2019	2020	2021	2022	2023
At least one aligned curriculum	15%	26%	26%	36%	35%
At least one partially aligned curriculum	23%	22%	16%	11%	9%
Unaligned curricula	20%	19%	14%	10%	9%
Unrated materials*	42%	33%	44%	43%	47%

Table 3: Use of standards-aligned math materials, 2019–2023

Rating Category	2019	2020	2021	2022	2023
At least one aligned curriculum	30%	42%	40%	48%	51%
At least one partially aligned curriculum	29%	21%	20%	16%	13%
Unaligned curricula	18%	17%	13%	9%	7%
Unrated materials*	23%	19%	27%	27`%	29%

^{*}Unrated materials include those not yet reviewed by EdReports, supplemental programs, and those created by the school or district. See Figures A1 and A2 in the 2022 State of the Market report for types of materials that comprise unrated materials.

Unfortunately, even with additional resources and how the increased demand for higher quality materials has shaped the market over time, use of high-quality materials in the classroom does not mirror the rise in availability.

More Recent Adoptions Increase the Likelihood of Using Aligned **Materials**

The COVID-19 pandemic ushered in unprecedented funding to states and districts, many of which utilized those funds to invest in new materials, which are more likely to meet our alignment criteria. Over half (53%) are utilizing curriculum that was provided over the past three years (Table 4).

- Of teachers using aligned materials, two-thirds (64%) report beginning their use in the past three years, while only one in five (19%) received them over five years ago.
- Four in 10 teachers using unaligned options began using them five or more years ago as compared to only 13% of those who recently began doing so.

Table 4: Aligned and unaligned curriculum use by year in all subject areas

Time Using Materials	Aligned	Unaligned	Overall
Just this school year	24%	13%	19%
For the past 2–3 school years	40%	28%	34%
For the past 4–5 school years	17%	19%	18%
For more than 5 school years	19%	40%	29%
Total	100%	100%	100%

How Materials Are Selected and Implemented Matters

To bridge the gap between availability and use, it is crucial that teachers are not only informed about new materials, but also engaged in their selection and implementation. Ensuring teachers have a meaningful and early voice in the adoption process helps ensure their experiences and expertise — and therefore the students' needs — inform material selection.

Notably, teachers are more willing to incorporate these materials into daily instruction when they understand their purpose and quality, and are able to participate in selection. Professional learning and ongoing coaching and feedback (more on this below) are key, but will be more effective and powerful if centered in a larger, educator-driven process attentive to local context and needs.

Comprehensive selection and implementation practices that are guided by data and an instructional vision, center alignment and local priorities, meaningfully engage stakeholders, and provide ongoing implementation resources can be the difference between materials sitting on the shelf or becoming one of the most crucial tools educators have to improve student learning.

Use of Aligned Materials Leads to Evidence-Based Teacher Practices

Using high-quality materials in the classroom can make a demonstrable difference in the instruction students receive. For example, a 2018 study illustrated that teachers using aligned materials engaged students in mathematical practices at a significantly higher rate than teachers without access to aligned curriculum.

Our analysis supports similar findings. When teachers use aligned materials, students have access to activities that are crucial for deepening understanding and fostering participation.

This means supporting student literacy in ELA; problem solving, explaining logic, and justifying solutions in mathematics; and using phenomena-driven instruction and scientific models in science. Regardless of subject area, the data below illustrates that teachers' practices are directly impacted by the content they use in the classroom.

Aligned materials in ELA support a wide range of literacy-enhancing activities, from applying academic vocabulary to practicing reading fluency. These high-quality materials facilitate frequent engagement in comprehensive literacy tasks, which support the development of critical reading and analytical skills (Table <u>5</u>).

- · Only one in five teachers using aligned materials report never applying phonics skills in recognizing and decoding words, as compared to one-third who use unaligned materials.
- Over half (52%) of teachers using aligned materials identified units of oral language such as words, syllables, onset/rime, or phonemes in a majority of lessons every week, as compared to one-third (37%) who use unaligned products.
- · Nearly half (49%) of teachers using aligned materials covered the same nonfiction text with their whole class in a majority of their weekly lessons, as compared to only one-third of those with unaligned curricula.



Table 5: Regularity of use of high-leverage ELA tasks by curriculum alignment

ELA Activities or Tasks	How Often Activity is Incorporated into Lessons	Aligned	Unaligned
	3–5 lessons per week	76%	67%
Applied academic or domain-specific vocabulary (i.e., words and phrases) they have learned in writing or speaking	1–2 lessons per week	23%	30%
	Never	2%	3%
	3–5 lessons per week	56%	42%
Applied phonics skills in recognizing or decoding words	1–2 lessons per week	24%	25%
	Never	20%	33%
Focused on the same, grade-level, fictional text as a whole class	3–5 lessons per week	58%	48%
	1–2 lessons per week	34%	39%
	Never	8%	12%
	3–5 lessons per week	49%	33%
Focused on the same, grade-level, nonfiction text as a whole class	1–2 lessons per week	39%	49%
	Never	12%	18%
	3–5 lessons per week	52%	37%
Identified units of oral language such as words, syllables, onset/rime, or phonemes	1–2 lessons per week	30%	30%
	Never	18%	33%
	3–5 lessons per week	50%	35%
Manipulated units of oral language such as words, syllables, onset/rime, or phonemes	1–2 lessons per week	29%	26%
	Never	21%	39%
Practiced reading with fluency (i.e., accuracy,	3–5 lessons per week	59%	49%
rate appropriate to text and task, or with expression)	1–2 lessons per week	28%	30%
expression)	Never	12%	21%

Aligned materials in mathematics encourage a broad spectrum of problem-solving and communication activities, including explaining mathematical thinking and justifying solutions. These practices are essential for helping students develop a deeper conceptual understanding and the ability to communicate mathematical ideas effectively (Table 6).

- · Seventy-five percent (75%) of teachers using aligned materials in a majority of their weekly lessons have students explain their mathematical thinking, compared to sixty-seven percent (67%) of those using unaligned curricula.
- Sixty-nine percent (69%) of teachers using aligned materials report that a majority of their lessons every week involve students justifying their solutions to mathematical problems, compared to sixty percent (60%) of those using unaligned materials.

Table 6: Regularity of use of high-leverage math tasks, by curriculum alignment

Math Activities or Tasks	How Often Activity is Incorporated into Lessons	Aligned	Unaligned
	3–5 lessons per week	67%	60%
Build on the mathematical thinking of other students	1–2 lessons per week	28%	32%
	Never	5%	8%
	3–5 lessons per week	75%	65%
Explain their mathematical thinking orally or in written form	1–2 lessons per week	21%	29%
	Never	3%	6%
	3–5 lessons per week	69%	60%
Justify their proposed solution to a mathematical problem in oral or written form	1–2 lessons per week	26%	30%
	Never	5%	9%
	3–5 lessons per week	56%	49%
Make sense of problems that do not have clear procedures for solving them	1–2 lessons per week	36%	41%
	Never	8%	9%
	3–5 lessons per week	68%	62%
Respond to the same kinds of problems in oral or written form repeatedly to build fluency	1–2 lessons per week	26%	30%
	Never	6%	8%

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Math Activities or Tasks	How Often Activity is Incorporated into Lessons	Aligned	Unaligned
	3–5 lessons per week	76%	67%
Take turns providing correct answers to problems	1–2 lessons per week	18%	25%
	Never	6%	8%
Work on unfamiliar mathematical problems	3–5 lessons per week	41%	35%
(i.e., problems that are not similar to other mathematical problems they have learned how to solve)	1–2 lessons per week	44%	48%
	Never	14%	17%

Aligned materials in science boost engagement in a variety of inquiry-based learning tasks, including constructing scientific arguments; using models; and obtaining, evaluating, or communicating information about scientific phenomena. These activities are crucial for developing a comprehensive understanding of scientific methods and encouraging critical thinking (Table 7).

- · More than half (55%) of teachers using aligned materials develop or use scientific models in a majority of their weekly lessons, as compared to a third (36%) of those using unaligned products.
- Four in ten (41%) of teachers report having students construct evidence-based scientific arguments when using aligned materials, as compared to three in ten (29%) using unaligned curricula.

Table 7: Regularity of use of high-leverage science tasks, by curriculum alignment

Science Activities or Tasks	How Often Activity is Incorporated into Lessons	Aligned	Unaligned
	3–5 lessons per week	41%	29%
Construct a scientific argument supported by evidence	1–2 lessons per week	45%	48%
	Never	14%	23%
	3–5 lessons per week	50%	42%
Construct their own explanations and arguments	1–2 lessons per week	41%	46%
	Never	9%	12%

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Science Activities or Tasks	How Often Activity is Incorporated into Lessons	Aligned	Unaligned
	3–5 lessons per week	55%	36%
Develop or use scientific models	1–2 lessons per week	31%	47%
	Never	14%	17%
	3–5 lessons per week	50%	37%
Obtain, evaluate or communicate information about a phenomenon	1–2 lessons per week	38%	41%
	Never	12%	22%
	3–5 lessons per week	53%	40%
Write in a science journal (e.g., taken notes/ recorded questions or observations)	1–2 lessons per week	37%	37%
	Never	10%	23%

Supporting Teachers to Implement Curricula Is Critical

Curriculum-Based Professional Learning Is Increasing, but More Is Needed

Strong implementation plans must include ongoing, curriculum-based professional learning (CBPL) for both teachers and leaders. Research indicates that teachers are more likely to use aligned materials when they have access to professional development and ongoing coaching around new programs — all of which improves student outcomes.

Teachers engaging in CBPL demonstrate significant developments in how they use their instructional materials (Table 8). A majority of teachers now spend more than a quarter of their professional learning time focused on curriculum materials (63% participate in workshops, 61% engage in collaborative learning, and 31% receive coaching).

This reflects a substantial increase from the previous year (37% in workshops, 47% in collaborative learning, and 28% in coaching).

Table 8: Professional learning time focused on use or adaptation of curriculum

Frequency	Coaching • Feedback on use of curriculum materials	Collaborative Learning • Use or adaptation of existing curriculum materials	Workshops/Training • Use or adaptation of existing curriculum materials
More than 50% of the time	9%	29%	33%
26–50%	22%	32%	30%
1–25%	50%	32%	30%
No time	19%	7%	7%
Total	100%	100%	100%

Curriculum-based professional learning encourages teachers to engage in the same inquiry-based learning that standards-aligned materials require, and has proven to be a powerful tool in helping educators strengthen their use of high-quality programs. This upward trend needs to continue for material usage to reach both the availability and rate that districts and states are requiring.

Teacher Preparations Need to Focus on Implementing **Curricula Skillfully**

The need for ongoing CBPL opportunities is further emphasized by the lack of preparation for new teachers on the components of high-quality instructional materials and why these resources matter.

Data from recent years reveal that teacher preparation programs have traditionally dedicated insufficient time to skillful use of provided curricula. For example, only 38% of programs emphasize how to skillfully use and modify curricula, while 71% continue to support developing personal lesson and unit plans (Table 9). This imbalance highlights a critical area for improvement in how we prepare educators to develop their practice.

Table 9: Emphasis in teacher preparation programs completed in the past 10 years

Areas Emphasized	%
How to develop my own lessons and unit plans	43%
How to skillfully use and modify curricula provided to me	10%
Both of these approaches equally	28%
Neither of these approaches	10%
I do not recall	9%
Total	100%

Because new teachers often have little background or training in curriculum literacy, supporting implementation of aligned instructional materials falls to schools and districts. This gap in training underscores the need for robust professional learning and systemic implementation support.

CALLS TO ACTION

Selecting aligned materials is necessary, but insufficient to foster student learning. Curriculum-based professional learning and effective implementation is essential to ensure materials are used — and used well. A lack of meaningful teacher engagement persists in the selection process, as does a dearth of learning supports for educators to understand what is high quality and how to use new curricula. In order to leverage the full potential of high-quality instructional materials for students, we recommend states, districts, and teacher preparation programs take the following actions:

- 1. Signal Quality: States and local school systems must emphasize the importance of instructional materials and educate stakeholders on what makes high-quality curricula. States in particular have the power to set high standards for recommending or requiring quality materials. However, they must also provide guidance and resources to help districts choose programs that meet state standards and address local needs.
 - States Leading High-Quality Instructional Materials (HQIM) Initiatives: Mississippi convened teachers and offered professional learning on how to evaluate materials, which led to a curated list of programs recommended for math adoption. Louisiana conducts reviews of K-12 instructional materials, assigning programs to tiers based on standards-aligned materials ratings. Nebraska developed a website to promote the value of high-quality instructional materials. These states, and others, model how to send strong signals to districts on HQIM best practices which will support their local adoption practices.
 - Districts Define HQIM to Align with Local Needs: Districts must communicate the importance of high-quality materials and provide guidance on how to select and implement them with integrity. Defining priorities is key to district selection processes. In seeking a new math curriculum, San Bernardino City Unified School District found high-quality materials that support multilingual learners, signaling their commitment to serving all students. Metro Nashville Public Schools developed the district's vision for instruction, signaling the important role materials would play in math instruction.

These signals from states and districts support increased use of aligned materials that meet students' needs. With only 35% of ELA teachers, 51% of math teachers, and 6% of science teachers using aligned curriculum, we must do more to ensure all students have access to high-quality content.

2. Prepare "Day-One" Ready Teachers: Integrating curriculum literacy (the understanding of HQIM) is critical for teacher preparation programs because it will ensure effective use of resources. While there are countless programs available, the importance of HQIM transcends the programs themselves.

Teacher candidates should leave their programs with the key ability to recognize HQIM, and should be critical consumers of content who are able to identify "look-fors" in these materials. This crucial understanding will support a decrease in using unvetted materials and will create more opportunities for students to engage with grade-level content through high-leverage practices, activities, and tasks.



Additionally, teacher candidates should know how to prepare lessons using aligned materials, how to leverage partially aligned materials, and how to advocate for better materials.

- 3. Place Teachers at the Heart of Materials Selection: A district's materials-selection process directly impacts how well programs are implemented. Meaningfully engaging teachers in the decision-making process supports buy-in that can lead to stronger classroom use of the materials.
 - We recommend 6 Key Adoption Steps for material selection that allow districts to support local context and instructional vision. Too often, district leaders make uninformed choices, adopting materials that fail to align with district capacity, speak to local priorities, or address holistic student needs. For example, 38% of California math teachers reported that district leaders typically determine classroom materials. Excluding teachers from the selection process can lead to resistance in using materials.
- 4. Provide Ongoing, Curriculum-Based Professional Learning: Materials matter because they raise expectations, address inequity, and leverage research-based practices to help students prepare for college and career. However, the materials alone are not magic. Teachers need support in how best to use the materials. Districts must not only invest in materials, but must also provide ongoing CBPL. Quality training and educator commitment to change are crucial to successful materials implementation.

METHODOLOGY

Analyses of materials available drew upon information on the EdReports website. Data for curricula series reviewed by EdReports were based on all reports published between February 11, 2015 and April 11, 2024 for 2023 copyright edition or older materials. Each high school math and middle grades science report is counted as three reports, corresponding with a traditional or integrated three-course sequence. All other reports are counted singularly, corresponding with the specific grade level of the report.

Analyses of materials used drew upon microlevel data from the RAND Corporation American Instructional Resources Survey (AIRS) for years 2019, 2020, 2021, 2022, and 2023 are completed by the American Teacher Panel in the spring of each year. Technical documentation is available for the AIRS 2019, AIRS 2020, AIRS 2021, AIRS 2022, and AIRS 2023. All analyses on AIRS microlevel data used the RAND sampling weights to produce estimates that reflect the national population of public school teachers in the United States.

For Tables 2, 3, and 4, estimates are based on responses to the survey question below, then filtered through EdReports rating data.

> "Among the [subject] curriculum materials in this list, select any materials you use regularly (once a week or more, on average) for your [subject] instruction this school year."

The method for calculating the percentage of teachers who use standards-aligned materials based estimates on the highest-rated curriculum teachers reported using regularly. For Table 4, data on the highest-rated curriculum teachers reported as recommended or required by their school or district regardless whether or not they were used — was also incorporated. The categories of materials reported (at least one aligned curriculum, at least one partially aligned curriculum, unaligned curricula, and unrated materials) are rank-ordered, whereby teachers were only designated a lower category if they did not report using materials in a higher-order category.

ABOUT EDREPORTS

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